



BACKGROUND OF THE INVENTION

The government owns rights in the present invention pursuant to grant number 5R29DE11689-04 from the National Institutes of Health and grant number 5 SP50DE11906-03 from the National Institutes of Dental and Craniofacial Research. The application claims benefit of priority to U.S. Provisional Application U.S. Serial No. 60/215,491, the entire contents of which is hereby incorporated by reference.

1. Field of the Invention

10 The present invention relates generally to the fields of cellular and molecular biology. More particularly, it concerns the use of peptides that targets tumor tissue and describes methods to achieve targeted delivery of anticancer drugs using this peptide. The invention also contemplates methods for using the peptide for the diagnosis and imaging of cancer.

2. Description of Related Art

A. Cancers

15 Cancer is one of the leading causes of disease, being responsible for 526,000 deaths in the United States each year. In 1998, the American Cancer Society estimated 20 that 60,000 Americans would be diagnosed with head and neck cancer. Head and neck cancer is the term given to a variety of malignant tumors that may occur in the head and neck region: the oral cavity (including the tissues of the lip or mouth such as the tongue, the gums, the lining of the cheeks and lips, the bottom of the mouth, the hard and soft palate and the retromolar trigone); the pharynx (including the hypopharynx, nasopharynx 25 and oropharynx, also called the throat); paranasal sinuses (including the frontal sinuses above the nose, the maxillary sinuses in the upper part of either side of the upper jawbone, the ethmoid sinuses just behind either side of the upper nose, and the sphenoid sinus behind the ethmoid sinus in the center of the skull) and nasal cavity; the larynx (also called the voicebox); thyroid gland (including cancers of the thyroid which are 30 papillary, follicular, medullary and anaplastic); parathyroid gland; salivary glands (including the major clusters of salivary glands found below the tongue, on the sides of the face just in front of the ears, and under the jawbone); lesions of the skin of the face

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The claim of this patent contains at least one drawing executed in color.